CIVIL TECH LABS

Accredited by NABL as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer
Vidyaranyapura Sub Division,
BBMP, Bangalore.

16th May 2014

Dear Sir,

Sub: Emergency works and maintenance of ward in ward no. 10, (Doddabommasandra), Vidyaranyapura Sub Division. Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

CIVIL TECH LABS BANGALORE

(KHUSHBOO L.)
Deputy Quality Manager

AE

CIVIL TECH LABS

TEST REPORT ON CONCRETE CUBES

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Project	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency	Sri. R. Narayanaswamy.
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 Sq.mm
Technical Reference	IS: 516-1959(Reaffirmed 2004)

Sl.No	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/Sq.mm)	Avg Compressive Strength (N/Sq.mm)
1	Sample-1 (Pavement)	16/04/2014	14/05/2014	28	8.21	505	22.44	22.22
2					8.19	495	22.00	
3					8.18	500	22.22	

Note:

1 The results relate only to the items tested.
2 Report shall not be reproduced except in full, without the written approval of the lab.
3 Any correction invalidates this report.
4 The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

CIVIL TECH LABS

TEST REPORT ON CONCRETE CUBES

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Project	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency	Sri. R. Narayanaswamy.
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 Sq.mm
Technical Reference	IS: 516-1959(Reaffirmed 2004)

Sl.No	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/Sq.mm)	Avg Compressive Strength (N/Sq.mm)
1	Sample-2 (Pavement)	16/04/2014	14/05/2014	28	8.19	500	22.22	21.93
2					8.20	495	22.00	
3					8.17	485	21.56	

Note:

1 The results relate only to the items tested.
2 Report shall not be reproduced except in full, without the written approval of the lab.
3 Any correction invalidates this report.
4 The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

AE

CIVIL TECH LABS

TEST REPORT ON CONCRETE CUBES

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Project	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency	Sri. R. Narayanaswamy.
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 Sq.mm
Technical Reference	IS: 516-1959(Reaffirmed 2004)

Sl.No	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/Sq.mm)	Avg Compressive Strength (N/Sq.mm)
1	Sample-1 (Drain)	18/04/2014	16/05/2014	28	8.19	490	21.78	21.78
2					8.20	495	22.00	
3					8.17	485	21.56	

Note:

1 The results relate only to the items tested.
2 Report shall not be reproduced except in full, without the written approval of the lab.
3 Any correction invalidates this report.
4 The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

CIVIL TECH LABS

TEST REPORT ON CONCRETE CUBES

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Project	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency	Sri. R. Narayanaswamy.
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 Sq.mm
Technical Reference	IS: 516-1959(Reaffirmed 2004)

Sl.No	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/Sq.mm)	Avg Compressive Strength (N/Sq.mm)
1	Sample-2 (Drain)	18/04/2014	16/05/2014	28	8.18	495	22.00	21.93
2					8.17	485	21.56	
3					8.19	500	22.22	

Note:

1 The results relate only to the items tested.
2 Report shall not be reproduced except in full, without the written approval of the lab.
3 Any correction invalidates this report.
4 The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

CIVIL TECH LABS

Accredited by NABL as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer
Vidyaranyapura Sub Division,
BBMP, Bangalore.

23rd April 2014

Dear Sir,

Sub: Emergency works and maintenance of ward in ward no. 10, (Doddabommasandra), Vidyaranyapura Sub Division. Testing of cubes – Reg.

As requested the 7th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

CIVIL TECH LABS BANGALORE

(KHUSHBOO L.)
Quality Manager

AE

CIVIL TECH LABS

TEST REPORT ON CONCRETE CUBES

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Project	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency	Sri. R. Narayanaswamy.
Grade of Concrete	M-15
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 Sq.mm
Technical Reference	IS: 516-1959(Reaffirmed 2004)

Sl.No	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/Sq.mm)	Avg Compressive Strength (N/Sq.mm)
1	CC-Work (Coping)	14/04/2014	21/04/2014	7	8.17	242	10.76	10.84
2					8.16	244	10.84	
3					8.18	246	10.93	

Note:

1 The results relate only to the items tested.
2 Report shall not be reproduced except in full, without the written approval of the lab.
3 Any correction invalidates this report.
4 The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

Jadhav
AE

CIVIL TECH LABS

TEST REPORT ON CONCRETE CUBES

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Project	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency	Sri. R. Narayanaswamy.
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 Sq.mm
Technical Reference	IS: 516-1959(Reaffirmed 2004)

Sl.No	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/Sq.mm)	Avg Compressive Strength (N/Sq.mm)
1	CC-Work (Pavement)	16/04/2014	23/04/2014	7	8.20	350	15.56	15.38
2					8.19	342	15.20	
3					8.18	346	15.38	

Note:

1 The results relate only to the items tested.
2 Report shall not be reproduced except in full, without the written approval of the lab.
3 Any correction invalidates this report.
4 The results are based on the test conducted on samples supplied by the client.

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS
BANGALORE

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

AE

CIVIL TECH LABS

Accredited by NABL as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer
Vidyaranyapura Sub Division,
BBMP, Bangalore.

13th April 2014

Dear Sir,

Sub: Testing of Materials.

As requested, tests on physical properties were carried out for the materials supplied by you, for the work of **'Emergency works and maintenance of ward in ward no. 10, (Doddabommasandra), Vidyaranyapura Sub Division'.**

Please find the enclosed Test Reports of the above.

Thanking You,
For Civil Tech Labs

Khushboo

CIVIL TECH LABS BANGALORE

(KHUSHBOO L.)
Deputy Quality Manager

Zaibha
AE

CIVILTECH LABS

TEST REPORT ON FINE AGGREGATES Ref:IS:383/2386

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Name of Work	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency Name	Sri. R. Narayanaswamy.

Sample	Date of Testing	Specific Gravity	IS Sieve designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement As Per IS 383-1970				Grading Zone
					ZONE-I	ZONE-II	ZONE-III	ZONE-IV	
Fine Aggregates	13/04/2014	2.58	10	100	100	100	100	100	II
			4.75	98.6	90-100	90-100	90-100	95-100	
			2.36	84.2	60-95	75-100	85-100	95-100	
			1.18	65.1	30-70	55-90	75-100	90-100	
			0.6	48.3	15-34	35-59	60-79	80-100	
			0.3	22.9	5-20	8-30	12-40	15-50	
			0.15	7.9	0-10	0-10	0-10	0-15	

Note:

1. The results relate only to the items tested.
2. Report shall not be reproduced except in full, without the written approval of the lab.
3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Mission Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LAB'S BANGALORE

CIVILTECH LABS

TEST REPORT ON CEMENT

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Name of Work	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency Name	Sri. R. Narayanaswamy.

Tests on Cement	Test Date	Tests	Test Method As Per IS & Apparatus		Results		Requirements As Per IS 8112 1989	Remarks
			IS Code	Method	Value	Unit		
	13/04/2014	Initial Setting Time	**IS-4031 (Part-5) 1988**	VICAT	49	min	Not Less Than 30 Minutes	Satisfies Requirement
		Final Setting Time	**IS-4031 (Part-5) 1988**	VICAT	489	min	Not More Than 600 Minutes	Satisfies Requirement
		Soundness	**IS-4031 (Part-3) 1988**	LE-CHATELIER	4	mm	Not More Than 10 mm	Satisfies Requirement

Note:

1.The results relate only to the items tested.

2.Report shall not be reproduced except in full, without the written approval of the lab.

3.Any correction invalidates this report.

4.The results are based on the test conducted on samples supplied by the Client

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

CIVILTECH LABS

TEST REPORT ON COARSE AGGREGATES 40mm ↓ Graded Ref:IS:383/2386

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Name of Work	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency Name	Sri. R. Narayanaswamy.

Sample	Date of Testing	Specific Gravity	Absorption in %	IS Sieve designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement As Per IS 383-1970	Remarks
40mm Down Graded	13/04/2014	2.66	0.29	**80**	100	**100**	Satisfies The Requirements
				40	99.1	**95-100**	
				20	55.3	**30-70**	
				10	22.8	**10-35**	
				4.75	3.8	**0-5**	

Note:

1. The results relate only to the items tested.
2. Report shall not be reproduced except in full, without the written approval of the lab.
3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

CIVILTECH LABS

TEST REPORT ON COARSE AGGREGATES 20mm ↓ Graded Ref:IS:383/2386

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Name of Work	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency Name	Sri. R. Narayanaswamy.

Sample	Date of Testing	Specific Gravity	Absorption in %	IS Sieve Designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement As Per IS 383-1970	Remarks
20mm Down Graded	13/04/2014	2.63	0.31	**40**	100	**100**	Satisfies The Requirement
				20	98.6	**95-100**	
				10	44.2	**25-55**	
				4.75	8.2	**0-10**	

Note:

1. The results relate only to the items tested.
2. Report shall not be reproduced except in full, without the written approval of the lab.
3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

CIVILTECH LABS

TEST REPORT ON REINFORCEMENT STEEL BARS 10mm

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Name of Work	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Agency Name	Sri. R. Narayanaswamy.
Date of Testing	13/04/2014

Sl.No.	Description	Result	IS 1786-1985 Min. Requirements	Remarks
1	Measured Diameter mm	10	10	Satisfactory
2	Wt/m Length (Kg/m)	0.618	0.617	Satisfactory
3	Bend & RebendTest	Pass	Should not Crack or Fracture	Satisfactory
4	Elongation (%)	15.1	14.5	Satisfactory
5	Yield Stress(N/Sq.mm)	421	415	Satisfactory
6	U T S (N/Sq.mm)	526	485	Satisfactory

Note:

1. The results relate only to the items tested.
2. Report shall not be reproduced except in full, without the written approval of the lab.
3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

CIVIL TECH LABS

TEST REPORT ON SOLID BLOCKS

Name of the Client	AEE, Vidyaranyapura Sub Division, BBMP
Name of the Work	Emergency works and maintenance of ward in ward no. 10,(Doddabommasandra), Vidyaranyapura Sub Division.
Name of the Agency	Sri. R. Narayanaswamy.
Date of Test	13/04/2014
Reference	IS: 2185(Part-I)2005
No. of samples tested	8
Grade	C (4.0)

COMPRESSIVE STRENGTH

Sl.No	Nominal Dimension(cms)	Compressive strength (N/mm^2)	Minimum Compressive Strength IS: 2185(Part-I)2005	
			Minimum Compressive Strength of Individual Units	Minimum Average Compressive Strength of Units
1	40x20x20	4.3	For Grade C (5.0)- 4.0 N/mm^2 For Grade C (4.0)- 3.2 N/mm^2	For Grade C (5.0)- 5.0 N/mm^2 For Grade C (4.0)- 4.0 N/mm^2
2		4.2		
3		4.4		
4		4.3		
5		4.1		
6		4.4		
7		4.3		
8		4.2		
Average compressive strength		**4.3**		

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

WATER ABSORBTION

Sl.No	Nominal Dimension(cms)	Water Absobtion (% by weight)	Average (% by Wt.)	Requirements as per IS: 2185(Part-I)2005
1	40x20x20	8.12	8.08	When three samples are tested the average water absorption shall not be more than 10% by mass
2		7.98		
3		8.14		

BLOCK DENSITY

Sl.No	Nominal Dimension(cms)	Block Density (kg/cu.m)	Average (Kg/cu.m)	Requirements as per IS: 2185(Part-I)2005
1	40x20x20	1864.13	1863.63	The Solid Concrete blocks used as load bearing units shall have average block density not less than 1800Kg/m^3
2		1863.98		
3		1862.78		

Note:

1.The results relate only to the items tested.
2.Report shall not be reproduced except in full, without the written approval of the laboratory.
3.Any correction invalidates this report.
4.The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS
5, I Floor I Cross
Srinivasa Colony, Misssion Road
BANGALORE - 560 027

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE